Table 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2022 (Number and percent distribution)

| | All U.S. citizens and permanent residents (number) | | U.S. citizen or permanent resident | | | | | | | | |
|--|---|-------|------------------------------------|---|-------|---------------------------------|-------|-----------------------------|---------------------------------------|------------------------------|--|
| | | Total | | | | | | | | | |
| Field of doctorate | | | Hispanic or Latino | American Indian or Alaska Native | Asian | Black or African American | White | More than one race | Other race or race not reported | Ethnicity not reported | |
| All fields | 35,311 | 100.0 | 9.5 | 0.3 | 10.2 | 7.5 | 66.0 | 3.4 | 1.2 | 1.9 | |
| Science and engineering | 26,801 | 100.0 | 9.4 | 0.2 | 11.3 | 6.0 | 66.4 | 3.6 | 1.2 | 1.8 | |
| Agricultural sciences | | | | | | | | | | | |
| and natural resources | 770 | 100.0 | 9.4 | 0.5 | 6.2 | 4.8 | 73.1 | 2.2 | 1.3 | 2.5 | |
| Agricultural, animal, plant, and veterinary sciences | 458 | 100.0 | 8.3 | 0.4 | 7.2 | 5.5 | 72.9 | 2.4 | 1.1 | 2.2 | |
| Natural resources and | | | | | | | | | | | |
| conservation | 312 | 100.0 | 10.9 | 0.6 | 4.8 | 3.8 | 73.4 | 1.9 | 1.6 | 2.9 | |
| Biological and biomedical sciences | 6,745 | 100.0 | 10.8 | 0.1 | 12.3 | 4.8 | 65.9 | 4.1 | 0.9 | 1.1 | |
| Biochemistry, biophysics, and molecular biology | 1,022 | 100.0 | 11.2 | 0.2 | 14.2 | 3.8 | 65.7 | 2.9 | 1.2 | 0.9 | |
| Bioinformatics, biostatistics, and computational biology | 364 | 100.0 | 5.8 | 0.0 | 25.0 | 3.6 | 59.3 | 4.1 | 1.1 | 1.1 | |
| Cell/ cellular biology | | | | | | | | | | | |
| and anatomy | 506 | 100.0 | 12.5 | 0.2 | 12.3 | 4.3 | 65.6 | 4.3 | 0.2 | 0.6 | |
| Ecology, evolutionary biology, and epidemiology | 890 | 100.0 | 9.2 | 0.2 | 7.1 | 6.5 | 71.3 | 4.4 | 0.7 | 0.6 | |
| Genetics and | | | | | | | | | | | |
| genomics | 335 | 100.0 | 11.0 | 0.0 | 10.1 | 3.6 | 70.7 | 1.8 | 1.8 | 0.9 | |
| Microbiology and immunology | 887 | 100.0 | 11.3 | 0.0 | 12.6 | 4.6 | 66.0 | 3.8 | 0.6 | 1.1 | |
| Neurobiology and neurosciences | 924 | 100.0 | 12.6 | 0.1 | 14.0 | 3.9 | 63.4 | 4.3 | 0.6 | 1.1 | |
| Pharmacology and toxicology | 285 | 100.0 | 10.9 | 0.0 | 11.6 | 10.5 | 60.7 | 4.9 | 1.1 | 0.4 | |
| Physiology, oncology, and cancer biology | 545 | 100.0 | 11.9 | 0.4 | 11.9 | 4.8 | 65.1 | 4.6 | 0.7 | 0.6 | |
| Biological and biomedical sciences, other | 987 | 100.0 | 10.0 | 0.1 | 9.8 | 4.5 | 66.1 | 5.0 | 1.7 | 2.8 | |
| Computer and information sciences | 774 | 100.0 | 5.6 | 0.1 | 19.8 | 5.4 | 61.1 | 3.2 | 2.3 | 2.5 | |
| Computer science | 539 | 100.0 | 5.0 | 0.2 | | 3.3 | 63.3 | 4.1 | 3.0 | 2.0 | |
| Computer and information sciences, other | 235 | 100.0 | 6.8 | 0.0 | 21.3 | 10.2 | 56.2 | 1.3 | 0.9 | 3.4 | |
| Engineering | 4,436 | 100.0 | 8.2 | 0.1 | 15.3 | 4.2 | 64.8 | 3.8 | 1.2 | 2.5 | |
| Biological, biomedical, and biosystems engineering | | 100.0 | 9.4 | 0.0 | | 3.1 | 59.7 | 4.4 | 1.3 | 1.5 | |
| Chemical and petroleum engineering | 569 | 100.0 | 5.8 | 0.4 | | 3.3 | 67.1 | 4.9 | 0.4 | 1.9 | |
| Civil, environmental, and transportation | | | 8.0 | 0.0 | | | | 3.2 | | | |
| engineering Electrical and computer engineering | 436 | 100.0 | 8.0 | 0.0 | | 7.8 6.3 | 65.4 | 2.5 | 1.4 | 2.8 | |

Table 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2022 (Number and percent distribution)

| | | U.S. citizen or permanent resident | | | | | | | | | | |
|--|---|------------------------------------|------------------------|---|-------|---------------------------------|-------|-----------------------------|---------------------------------------|------------------------------|--|--|
| | | | Not Hispanic or Latino | | | | | | | | | |
| Field of doctorate | All U.S. citizens and permanent residents (number) | Total | Hispanic or Latino | American Indian or Alaska Native | Asian | Black or African American | White | More than one race | Other race or race not reported | Ethnicity not reported | | |
| Engineering | | | | | | | | | | | | |
| technologies | 102 | 100.0 | 5.9 | 0.0 | 23.5 | 5.9 | 56.9 | 2.9 | 1.0 | 3.9 | | |
| Industrial engineering and operations research | 220 | 100.0 | 5.5 | 0.0 | 12.7 | 8.6 | 65.5 | 2.7 | 2.7 | 2.3 | | |
| Materials and mining engineering | 443 | 100.0 | 7.9 | 0.2 | 14.9 | 3.4 | 67.3 | 3.6 | 0.9 | 1.8 | | |
| Mechanical engineering | 644 | 100.0 | 10.2 | 0.0 | 13.0 | 2.2 | 67.1 | 3.4 | 1.4 | 2.6 | | |
| Engineering, other | 628 | 100.0 | 8.1 | 0.2 | 9.4 | 3.0 | 69.9 | 4.5 | 1.0 | 4.0 | | |
| Geosciences, atmospheric, and ocean sciences | 727 | 100.0 | 8.3 | 0.0 | 6.3 | 2.3 | 78.3 | 3.0 | 0.4 | 1.4 | | |
| Geological and earth sciences | 385 | 100.0 | 7.5 | 0.0 | 5.7 | 2.6 | 80.0 | 2.9 | 0.3 | 1.0 | | |
| Ocean, marine, and atmospheric sciences | 342 | 100.0 | 9.1 | 0.0 | 7.0 | 2.0 | 76.3 | 3.2 | 0.6 | 1.8 | | |
| Health sciences | 1,973 | 100.0 | 7.9 | 0.2 | 9.7 | 13.8 | 63.4 | 2.5 | 0.8 | 1.7 | | |
| Nursing and nursing science | 512 | 100.0 | 7.4 | 0.2 | 8.2 | 13.5 | 65.6 | 2.3 | 1.0 | 1.8 | | |
| Pharmacy and pharmaceutical sciences | 192 | 100.0 | 7.8 | 0.0 | 17.2 | 5.2 | 66.7 | 0.5 | 0.5 | 2.1 | | |
| Public health | 586 | 100.0 | 8.7 | 0.5 | 10.4 | 21.2 | 54.8 | 2.9 | 0.7 | 0.9 | | |
| Health sciences, other | 683 | 100.0 | 7.6 | 0.0 | 8.2 | 10.1 | 68.1 | 2.9 | 0.7 | 2.3 | | |
| Mathematics and statistics | 966 | 100.0 | 6.1 | 0.2 | 12.5 | 2.7 | 68.4 | 5.2 | 1.7 | 3.2 | | |
| Applied mathematics | 210 | 100.0 | 6.2 | 0.0 | 12.9 | 3.8 | 68.6 | 5.2 | 1.4 | 1.9 | | |
| Mathematics | 553 | 100.0 | 6.3 | 0.2 | 9.2 | 0.9 | 71.6 | 5.4 | 1.8 | 4.5 | | |
| Statistics | 203 | 100.0 | 5.4 | 0.5 | 21.2 | 6.4 | 59.6 | 4.4 | 1.5 | 1.0 | | |
| Multidisciplinary/ interdisciplinary sciences | 816 | 100.0 | 10.0 | 0.1 | 13.7 | 5.1 | 62.9 | 3.4 | 3.2 | 1.5 | | |
| Interdisciplinary computer sciences | 236 | 100.0 | 8.5 | 0.0 | 21.2 | 3.0 | 58.1 | 4.2 | 4.2 | 0.8 | | |
| Multidisciplinary/ interdisciplinary sciences, other | 580 | 100.0 | 10.7 | 0.2 | 10.7 | 6.0 | 64.8 | 3.1 | 2.8 | 1.7 | | |
| Physical sciences | 3,108 | 100.0 | 8.3 | 0.2 | 10.2 | 2.6 | 72.1 | 3.4 | 1.2 | 2.0 | | |
| Astronomy and astrophysics | 204 | 100.0 | 11.3 | 0.5 | 6.9 | 4.9 | 71.1 | 2.9 | 1.0 | 1.5 | | |
| Chemistry | 1,665 | 100.0 | 7.7 | 0.1 | 10.3 | 2.9 | 72.1 | 3.4 | 1.1 | 2.4 | | |
| Materials sciences | 193 | 100.0 | 14.0 | 0.5 | 11.4 | 3.1 | 64.8 | 4.1 | 1.6 | 0.5 | | |
| Physics | 1,046 | 100.0 | 7.6 | 0.2 | 10.5 | 1.6 | 73.6 | 3.4 | 1.2 | 1.8 | | |
| Psychology | 3,295 | 100.0 | 11.4 | 0.3 | 7.1 | 8.7 | 65.3 | 3.6 | 1.3 | 2.2 | | |
| Clinical psychology | 1,029 | 100.0 | 11.0 | 0.5 | 7.0 | 5.4 | 68.8 | 3.6 | 1.1 | 2.6 | | |
| Counseling and applied psychology | 1,226 | 100.0 | 11.3 | 0.2 | 6.6 | 12.2 | 63.3 | 3.5 | 1.6 | 1.3 | | |

Table 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2022 (Number and percent distribution)

| | U.S. citizen or permanent resident | | | | | | | | | |
|---|---|-------|------------------------|---|-------|---------------------------------|-------|-----------------------------|---------------------------------------|------------------------------|
| | | | Not Hispanic or Latino | | | | | | | |
| Field of doctorate | All U.S. citizens and permanent residents (number) | Total | Hispanic or Latino | American Indian or Alaska Native | Asian | Black or African American | White | More than one race | Other race or race not reported | Ethnicity not reported |
| Research and | | | | | | | | | | |
| experimental psychology | 701 | 100.0 | 11.4 | 0.3 | 8.8 | 6.1 | 66.9 | 3.6 | 0.7 | 2.1 |
| Psychology, other | 339 | 100.0 | 13.0 | 0.3 | 5.3 | 11.5 | 59.0 | 4.1 | 2.4 | 4.4 |
| Social sciences | 3,191 | 100.0 | 10.5 | 0.5 | 9.1 | 9.2 | 64.6 | 3.5 | 1.2 | 1.3 |
| Anthropology | 329 | 100.0 | 9.7 | 0.9 | 7.6 | 4.0 | 67.8 | 6.7 | 1.5 | 1.8 |
| Area, ethnic, cultural, gender, and group studies | 331 | 100.0 | 17.2 | 2.4 | 9.1 | 15.7 | 48.0 | 5.7 | 1.2 | 0.6 |
| Economics | 515 | 100.0 | 6.0 | 0.0 | 16.7 | 4.1 | 67.2 | 2.3 | 1.2 | 2.5 |
| Political science and government | 465 | 100.0 | 9.7 | 0.0 | 6.7 | 3.4 | 73.5 | 2.8 | 2.6 | 1.3 |
| Public policy analysis | 325 | 100.0 | 10.5 | 0.3 | 9.5 | 23.4 | 50.5 | 4.3 | 1.2 | 0.3 |
| Sociology, demography, and population studies | 496 | 100.0 | 13.5 | 0.0 | 6.9 | 11.9 | 63.3 | 3.4 | 0.4 | 0.6 |
| Social sciences, other | 730 | 100.0 | 9.5 | 0.7 | 7.3 | 7.9 | 70.3 | 2.2 | 0.8 | 1.4 |
| Non-science and engineering | 8,510 | 100.0 | 9.7 | 0.5 | 6.6 | 12.2 | 64.9 | 2.8 | 1.2 | 2.2 |
| Business | 651 | 100.0 | 7.1 | 0.5 | 16.9 | 13.2 | 56.1 | 2.0 | 2.3 | 2.0 |
| Business administration and management | 211 | 100.0 | 4.7 | 0.0 | 14.7 | 18.0 | 53.6 | 1.9 | 3.3 | 3.8 |
| Business, other | 440 | 100.0 | 8.2 | 0.7 | 18.0 | 10.9 | 57.3 | 2.0 | 1.8 | 1.1 |
| Education | 3,205 | 100.0 | 10.6 | 0.7 | 5.0 | 18.1 | 60.3 | 2.5 | 0.8 | 2.0 |
| Education leadership and administration | 1,050 | 100.0 | 11.2 | 0.9 | 4.2 | 23.8 | 54.9 | 1.9 | 0.5 | 2.7 |
| Education research | 924 | 100.0 | 9.8 | 0.4 | 4.2 | 18.2 | 61.0 | 3.1 | 1.0 | 2.2 |
| Teacher education | 863 | 100.0 | 8.8 | 0.9 | 6.3 | 11.7 | 68.4 | 1.9 | 1.0 | 1.0 |
| Education, other | 368 | 100.0 | 14.7 | 0.3 | 6.5 | 16.8 | 54.9 | 4.1 | 0.8 | 1.9 |
| Humanities | 2,634 | 100.0 | 10.2 | 0.2 | 4.8 | 5.4 | 72.5 | 3.0 | 1.3 | 2.8 |
| English language and literature, letters | 910 | 100.0 | 7.6 | 0.2 | 4.7 | 5.5 | 75.6 | 3.3 | 1.0 | 2.1 |
| Foreign languages, literatures, and linguistics | 332 | 100.0 | 26.5 | 0.3 | 4.5 | 3.0 | 57.5 | 2.7 | 0.6 | 4.8 |
| History | 593 | 100.0 | 9.1 | 0.2 | 3.5 | 6.6 | 74.5 | 3.4 | 1.0 | 1.7 |
| Philosophy and religious studies | 511 | 100.0 | 7.0 | 0.0 | 5.3 | 5.5 | 74.0 | 2.7 | 1.8 | 3.7 |
| Humanities, other | 288 | 100.0 | 7.3 | 0.0 | 6.9 | 5.6 | 72.9 | 1.7 | 2.4 | 3.1 |
| Visual and performing arts | 619 | 100.0 | 9.4 | 0.5 | 8.9 | 5.0 | 69.6 | 3.2 | 1.5 | 1.9 |
| Performing arts | 354 | 100.0 | 9.3 | 0.3 | 5.1 | 6.8 | 72.0 | 4.0 | 0.6 | 2.0 |
| Visual arts, media studies, and design | 265 | 100.0 | 9.4 | 0.8 | | 2.6 | 66.4 | 2.3 | 2.6 | 1.9 |
| Other non-science and engineering | 1,401 | 100.0 | 8.1 | 0.6 | 8.1 | 14.1 | 63.0 | 3.3 | 1.4 | 1.5 |
| Communications and journalism | 386 | 100.0 | 7.3 | 0.5 | 7.5 | 7.5 | 71.5 | 2.6 | 2.1 | 1.0 |

Table 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2022

(Number and percent distribution)

| | | | U.S. citizen or permanent resident | | | | | | | |
|--|---|-------|------------------------------------|---|-------|---------------------------------|-------|-----------------------------|---------------------------------|------------------------------|
| | | | | | | | | | | |
| Field of doctorate | All U.S. citizens and permanent residents (number) | Total | Hispanic or Latino | American Indian or Alaska Native | Asian | Black or African American | White | More than one race | Other race or race not reported | Ethnicity not reported |
| Multidisciplinary/ interdisciplinary studies | 291 | 100.0 | 6.2 | 0.3 | 5.5 | 10.3 | 72.2 | 3.4 | 1.0 | 1.0 |
| Public administration and social services | 338 | 100.0 | 10.1 | 1.2 | 8.3 | 24.3 | 49.4 | 4.1 | 1.2 | 1.5 |
| Non-science and engineering, other | 386 | 100.0 | 8.8 | 0.3 | 10.4 | 14.8 | 59.3 | 3.1 | 1.0 | 2.3 |

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in table A-4. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information, see the "Technical Notes" and the SED 2021 Taxonomy Changes Working Paper (available at https://ncses.nsf.gov/pubs/ncses23200).

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.